

User Policy for TTP (Targeted Therapeutic Drug Discovery and Development)

This agreement details the basic policies for use of the TTP Core Facility.

General Guideline

- The facility operates on a staff-assisted model. Users must be registered, trained, and approved by TTP core director in advance to utilize facility equipment and access to the facility.
- Once the User demonstrates their ability of independent use and provides billing account information, the facility staff will register the User for the TTP system including instrument scheduler website and key card, which allows Users to access the lab and the reservation scheduler 24/7. **Warning; Users can't be registered until they provide effective UT account.**
- **Temporary users;** any rotational graduation student and undergraduate students will have limited access to the TTP core. Door access and unsupervised instrument use may be offered. For instrument reservation or access to other resources, they should contact either their supervisor or TTP staff.
- Cancellation of a training appointment should be emailed to TTP core director at least 48 hours in advance. If Users do not show up for training without notice, they will be charged according to original appointment.
- The TTP core does not provide reagents or consumables. Users are responsible to bring all reagents, consumables, and personnel tools. Any consumables and small equipments in the lab are reserved for use by core facility personnel.
- Users should notify TTP core staff immediately if there is any problem with instruments or computers.
- Users must clean up after themselves when their experiments are completed, including any instruments, associated computers and surroundings. Anything left behind will be discarded by core personnel. We have limited data storage space, so any data left on instrument-associated PCs should be transferred immediately after experiments.
- BME 4.512 is **BSL-2** certified lab. Users should follow appropriate regulations such as no open toe shoes, no food, and wearing gloves, lab coat, and goggle.

Fees

- The TTP core operates on a fee-based structure. Please ask TTP director for detailed information. Instrument usage will be charged based on hours signed on reservation system and billed monthly.
- Screening costs will be estimated based on labor, instrument usage, consumables, and chemical libraries and provided to Users when the screen is initiated. Final cost may be altered depending on assay progress and will be billed when the screen is completed. Any consumables (disposable tips, plastic labware, and reagents) purchased by TTP for Users' assay will be billed with other fees. Service fees will be charged monthly.

Instrument reservation

- Users should reserve instruments prior to their experiment using our online scheduler @ <http://scheduler.ti3d.utexas.edu/>.
- Users' log in to this on-line scheduler will be activated once Users demonstrate their ability to perform experiments independently and provide effective UT account information. TTP will keep monitoring the usage per Users. Users who do not use the instruments for last 6 Months will be automatically deleted without warning unless Users specifically request.
- Failure to make a reservation on the scheduler and any ensuing problems will be the Users' responsibility. If Users do not show up for their scheduled instrument reservations during the reserved time, the instrument will be charged based on the originally scheduled reservation. In case Users need to modify



their reservation, they are allowed to do so within 24h from the actual reservation time. This is to minimize any extra cost from unused reservation. **ATTENTION!** Instruments will be held for 30 minutes and then released to other Users if the originally scheduled User does not show.

Compound Screening and Informatics

- Detailed guideline for screening is in a separate document and will be provided to screen Users only.
- All biological and chemical data generated from the core will be securely stored in CDD DB system and managed by TTP core director.
- Users can access data for mining purpose after approved by TTP core director.
- Information obtained from screening is kept confidential until released by the TTP and is only accessible to TTP Users who have deposited their screening data. Any data may be used by TTP core staff to help others in screening tasks, or for purpose of statistical comparison between hits and libraries.
- Users can access data of other Users if necessary, but this must be done in confidence, and should never lead to the disclosure of any unpublished data without permission.

Publication and acknowledgments

- Co-authorship on both publications and patents for TTP core staff may be considered appropriate if the staff have provided; 1) significant intellectual contribution to the design of experiments, or 2) substantial practical contribution to the generation, analysis, and/or interpretation of experimental data.
 - In any oral presentation or publication, Users are requested to formally acknowledge by written citation or in final acknowledgements the contribution made by the screening facility and, if possible, specific facility personnel. Please quote as follows,
Example 1. "We thank TTP (Targeted Therapeutic Drug Discovery and Development Program) at The University of Texas-Austin for the selection and distribution of compound libraries. The TTP core facility is supported by CPRIT (Cancer Prevention Research Institute of Texas) grant RP160657."
Example 2. " We thank TTP (Targeted Therapeutic Drug Discovery and Development Program) at The University of Texas-Austin for their support on high-throughput screening and chemical libraries."
- Users should notify the TTP if work performed in the facility results in a publication or patent.

I have read and understood the High Throughput Screening Facility User Agreement.

Signature of Project Leader

Printed Name

Date

Signature of Principal Investigator

Printed Name

Date

Please sign and send a form to:

Eun Jeong Cho, Ph.D., Director of TTP Core
The College of Pharmacy
The University of Texas-Austin
107 W. Dean Keeton st, BME 6.202E, C0850
Austin, TX 78712
512-232-5857 (phone)

General guideline for high throughput screening

Before inquiring/initiate HTS service, Users and PIs must read this guideline and agree.

1. First meeting:

- Users, PIs and the HTAF Director meet to explore the feasibility and significance of assay, time frame, and level of collaboration.
- Users need to provide following information for this meeting:
 - ✓ Brief proposal for the HTS rationale and assay plan including target information.
 - ✓ At least two relevant journal articles on the topic.

2. Assay Development and Validation:

- Users provide detailed HTS assay protocols (reagent, buffer, timing, temp, and vol. etc), sufficient experimental data (Kd, Km, negative or positive control, DMSO resistance, assay stability, and safety issues etc), and any references in support of the proposed assay.
- Users clarify the availability of reagent supplies and cost limitations and can suggest equipment and special equipment requirements.
- Users will be made aware of what they should provide in order for the facility to have sufficient reagents to run their experiments. Protocols can be modified during the assay development but such modifications must be agreed upon by both the User and HTAF.
- The assay validation process should meet the criteria of proving to be robust in at least 3 independent experiments (3 different days from different batches).
- Although HTAF will do best to accommodate Users' need and time frame, screen schedule will be primarily based on the availability of HTAF.

3. Screening Approval and Withhold:

Before beginning a primary screening, assay should pass validation requirement and then approved by HTAF director. If the validation is not satisfactory, HTAF director can request to redesign assay protocol or reject the assay for HTS. Screen project can also be withheld at any time if Users and PIs do not follow the guideline.

4. Primary screen:

- All libraries will be screened at a single dose (10-50uM, Users should justify if they wish higher concentration).
- The general order of library screening is pilot screen (using NIH clinical collection (446 cpds) and Spectrum collection (2,000 cpds)), followed by the full T13D library screen (~30k commercial cpds). However, Users can select libraries.
- Users provide preliminary definition of "Hit" criteria, for example Inhibition % or activation %, Intensity >50%, etc.
- Users can analyze data by themselves but should send to HTAF director to be uploaded to database with appropriate format.
- The HTAF will perform quality control (QC) tests for assay plates, identify hits, and provide a summary of that report to Users.
- The HTAF staff assists Users to re-supply compounds for assay validation.

5. Confirmation screen:

- Upon the Users' request, a "cherry pick" or secondary screen can be done in order to confirm hits determined in the full library screen. To precede cherry pick, Users should provide list of compounds and the primary result in Excel format.
- Maximum quantity of library use is <1.5 uL (10mM) per screen. Higher amount will be counted as double use.
- Cherry pick assay or 2nd assay often require modification of assay, **but such modifications must be agreed upon by both the User and HTAF staff** and validated in prior to run screen.

General guideline for using TI3D Automation facility

Lab safety

- BSL-2: WEL 3.316 is BSL-2 certified lab, Users should follow appropriate regulation such as no open toe shoes, no food, and wearing gloves, lab coat, and goggle.
- Emergency kit: Biosafety kit and chemical spill kit are on top of Freezer #4.
- Waste: Sharp container, glass disposal, and bio hazardous containers are around the lab. Please use them correspondingly and inform staff if they need to be replaced.
- Liquid disposal: Many instruments have liquid wasting container connected. They should have appropriate labeled, securely attached, and covered with caps. Once they are full, contact facility staff for disposal. (Disposal request form is in the lab)
- Fire extinguisher: located next to the main door.
- Eye washer: located next to a sink on north side of the lab.

General use equipments and consumables

- Disposable gloves and kimwipes are around the lab for facility use.
- Balances along with weighing dishes and spatula are provided. Please keep clean the balances and surrounding area.
- PH meter, evaporator, ultrasonicator are located on Westside of the lab.
- Color laser printer is connected to all instruments' Pc.
- Centrifuge, plate sealer, mini centrifuge, and vortex are north side of the lab.
- DI purified water system is installed near a north side sink.